=> (receiver or decoder) (p) packets (p) frame (p) integer

113369 RECEIVER

52425 DECODER

11-731 PACKETS

351820 FRAME

APS Seavel 08/488,322 1-8-97 SH

93689 INTEGER

L1 5 (RECEIVER OR DECODER) (P) PACKETS (P) FRAME (P) INTEGER => d 11 1-5

- 1. 5,555,183, Sep. 10, 1996, Method and apparatus for synchronizing to a synchronous selective call signal; David F. Willard, et al., 340/825.21, 825.2, 825.44 [IMAGE AVAILABLE]
- 2. 5,325,088, Jun. 28, 1994, Synchronous selective signalling system; David F. Willard, et al., 340/825.2, 825.21, 825.44; 370/313 [IMAGE AVAILABLE]
- (3. 5,323,396, Jun. 21, 1994, Digital transmission system, transmitter and receiver for use in the transmission system; Gerardus C. P. Lokhoff, 370/468; 360/48; 370/471, 509; 375/241; 395/2.1 [IMAGE AVAILABLE]
- 4. 5,200,956, Apr. 6, 1993, Communications system for data transmission over a time division duplex frequency channel; Christopher D. Pudney, et al., 370/280, 332, 337, 338 [IMAGE AVAILABLE]
- 5. 4,398,290, Aug. 9, 1983, Process and apparatus for digital data communication using packet switching; Michel Mathieu, et al., 370/473 [IMAGE AVAILABLE] => d l1 ab 1-5

US PAT NO:

5,555,183 [IMAGE AVAILABLE]

L1: 1 of 5

ABSTRACT:

A selective call receiver (111) receives a synchronous selective call signal (99) having synchronization portions (102 and 104) and a frame identification portion (106). Upon finding the signal the selective call receiver's bit and frame synchronizers (126 and 128) synchronize to a frame (100) of the signal and a frame ID decoder (130) decodes the frame ID (106). A comparator (136) compares the received frame ID (106) with an ID (142) assigned to the receiver, and optionally a first and second mask (134A and 134B) to determine the number of frames until an occurrence of a desired frame and conserves power until the occurrence of the desired frame (188).

US PAT NO:

5,325,088 [IMAGE AVAILABLE]

L1: 2 of 5

ABSTRACT:

A selective call receiver (111) has a first mask (134A) stored within the selective call receiver (111) indicative of a first period of reception for receiving a transmitted communication signal (99) having a plurality of packets (100). Each of the transmitted packet (100) has message information (110). An identifier (106) identifies the packet (100). The control signal (108) is representative of a second mask (134B) indicative of a second period of reception. The second mask is compared with the first mask for determining the second period of reception of the

selective call receiver (111). A correspondence between the first and second masks determines whether to change the first period of reception of the selective call receiver (111) for receiving at least one additional packet.

US PAT NO:

5,323,396 [IMAGE AVAILABLE]

L1: 3 of 5

ABSTRACT:

Digital data are transmitted as packets within frames, at an average frame rate equal to the sampling rate divided by the number of samples per frame. When, as a result of subband or other coding, the number of packets required per frame would not be an integer, frames containing the next lower integer are transmitted, followed by frames containing the next higher integer. Preferably a first portion of each frame contains synchronization information, a second portion contains allocation information, and a third contains samples of, and scale factor information for, the transmitted signal.

US PAT NO:

5,200,956 [IMAGE AVAILABLE]

L1: 4 of 5

ABSTRACT:

A communication system such as a digital cordless telephone system comprises primary (or base) stations (PS) and secondary stations (SS). The primary stations over a local area are coupled to a system controller (14 or 15) which interfaces with the PSTN. A TDMA method is used for forward and reverse transmissions between a primary and a secondary station. For digitized speech transmission normally one duplex voice channel formed by one forward time slot (or physical channel) and one reverse time slot (or physical channel) in each frame is allocated for the transaction. For fast data rates it is desirable that additional duplex voice channels be made available quickly for the transmission of a fast data message, after which the additional duplex voice channels can be relinquished. In order to facilitate the rapid set-up of a data transaction, a map store in each data secondary station lists the usage and quality of all the duplex voice channels. The secondary station, when ready to transmit data, immediately uses additional duplex voice channels from those listed, thus avoiding the necessity of scanning all the duplex voice channels before deciding on which additional duplex voice channels to attempt to transmit in.

US PAT NO: 4,398,290 [IMAGE AVAILABLE]

L1: 5 of 5

ABSTRACT:

The consequences of the loss of a packet are attenuated in a digital data communication apparatus using packet switching by structuring the digital data as multibit words into frames having a fixed length 1 and assembling the frames into **packets** all having the same predetermined length L=kl, where k is a predetermined **integer**. Continuity index words incremented by one each time a new **frame** or packet is assembled may be located into the **frame** locking word or the packet prefix. Then the number of **packets** which are lost may be determined at the **receiver** location by monitoring the successively received index words. When the digital data represent successive samples which are correlated, for instance when such samples represent a sound, substitution data may be generated at the **receiver** location and used in place of the missing data.

- 1. 5,583,650, Dec. 10, 1996, Digital recording and playback device error correction methods and apparatus for use with trick play data; Frank A. Lane, et al., 386/81 [IMAGE AVAILABLE]
- 2. 5,576,902, Nov. 19, 1996, Method and apparatus directed to processing trick play video data to compensate for intentionally omitted data; Frank A. Lane, et al., 386/68, 109, 113 [IMAGE AVAILABLE]
- 3. 5,576,844, Nov. 19, 1996, Computer controlled video interactive learning system; Ronald K. Anderson, et al., 386/52, 96 [IMAGE AVAILABLE]
- 4. 5,565,997, Oct. 15, 1996, Device and method for data recording and/or reproducting data multiplexed with video and/or audio signals; Alan J. Terry, 386/46; 348/468 [IMAGE AVAILABLE]
- 5. 5,563,892, Oct. 8, 1996, Method of upgrading the program transport capacity of an RF broadcast channel; Bruce Kostreski, et al., 370/487; 348/385; 370/477; 455/51.2 [IMAGE AVAILABLE]
- 6. 5,561,686, Oct. 1, 1996, Radio information communication system using multi-carrier spread spectrum transmission system; Hiroshi Kobayashi, et al., 375/200 [IMAGE AVAILABLE]
- 7. 5,559,808, Sep. 24, 1996, Simulcasting digital video programs; Bruce Kostreski, et al., 370/517; 348/385; 370/535; 375/356; 455/51.2 [IMAGE AVAILABLE]
- 8. 5,559,796, Sep. 24, 1996, Delay control for **frame**-based transmission of data; Brian C. Edem, et al., 370/412, 468, 517 [IMAGE AVAILABLE]
- 9. 5,548,595, Aug. 20, 1996, Signal receiver; Masatoshi Hirayasu, 371/5.5, 5.1 [IMAGE AVAILABLE]
- 10. 5,544,176, Aug. 6, 1996, Information recording apparatus which eliminates unnecessary data before recording; Akio Fujii, et al., 371/40.1; 348/390, 423; 360/48; 386/75, 95, 116 [IMAGE AVAILABLE]
- 11. 5,543,932, Aug. 6, 1996, Digital video signal recording apparatus and digital video signal **reproducing** apparatus; Ching-Fang Chang, et al., 386/81; 348/423; 386/111 [IMAGE AVAILABLE]
- 12. 5,539,829, Jul. 23, 1996, Subband coded digital transmission system using some composite signals; Gerardus C. P. Lokhoff, et al., 381/2; 395/2.12, 2.14, 2.38, 2.92 [IMAGE AVAILABLE]
- 13. 5,537,409, Jul. 16, 1996, Synchronizing system for time-divided video and audio signals; Yoshiaki Moriyama, et al., 370/471; 348/423; 370/474, 506, 509, 535 [IMAGE AVAILABLE]
- 14. 5,530,655, Jun. 25, 1996, Digital sub-band transmission system with transmission of an additional signal; Gerardus C. P. Lokhoff, et al., 364/514A; 348/398, 405; 381/22, 23 [IMAGE AVAILABLE]
- 15. 5,510,845, Apr. 23, 1996, Receivers for digital signals buried within the trace and retrace intervals of NTSC television signals; Jian Yang, et al., 348/476, 486 [IMAGE AVAILABLE]

- 16. 5,508,733, Apr. 16, 1996, Method and apparatus for selectively receiving and storing a plurality of video signals; L. Samuel A. Kassatly, 348/13, 7, 8, 10, 12, 385, 426; 455/5.1 [IMAGE AVAILABLE]
- 17. 5,506,902, Apr. 9, 1996, Data broadcasting system; Ichiro Kubota, 380/9, 20 [IMAGE AVAILABLE]
- 18. 5,506,847, Apr. 9, 1996, ATM-lan system using broadcast channel for transferring link setting and chaining requests; Yasuro Shobatake, 370/338, 397, 408, 410 [IMAGE AVAILABLE]
- 19. 5,497,205, Mar. 5, 1996, Apparatus for processing BPSK signal transmitted with NTSC TV on quadrature-phase video; Jian Yang, et al., 348/737, 475, 726; 375/326, 329 [IMAGE AVAILABLE]
- 20. 5,493,339, Feb. 20, 1996, System and method for transmitting a plurality of digital services including compressed imaging services and associated ancillary data services; Christopher H. Birch, et al., 348/461, 465, 467, 468, 478 [IMAGE AVAILABLE]
- 1/21. 5,487,067, Jan. 23, 1996, Audio data communications; Takashi Matsushige, 370/460; 369/4; 370/258; 381/80, 119 [IMAGE AVAILABLE]
 - 22. 5,471,350, Nov. 28, 1995, Record carrier with alternating frames and interframe gaps; Gerardus C. P. Lokhoff, 360/48 [IMAGE AVAILABLE]
 - 23. 5,448,299, Sep. 5, 1995, Apparatus for processing BPSK signals transmitted with NTSC TV on quadrature-phase video carrier; Jian Yang, et al., 348/475, 470, 484; 375/301, 329 [IMAGE AVAILABLE]
 - 24. 5,442,400, Aug. 15, 1995, Error concealment apparatus for MPEG-like video data; Huifang Sun, et al., 348/402, 409, 413, 416, 466 [IMAGE AVAILABLE]
 - 25. 5,438,370, Aug. 1, 1995, Apparatus and methods for providing close captioning in a digital program services delivery system; Guy A. Primiano, et al., 348/476, 478 [IMAGE AVAILABLE]
 - 26. 5,412,636, May 2, 1995, Apparatus for servo-controlling objective lens in recording and/or **reproducing** apparatus using optical record medium; Keitaro Hashimoto, et al., 369/44.32, 44.35, 44.41, 54, 58 [IMAGE AVAILABLE]
 - 27. 5,410,354, Apr. 25, 1995, Method and apparatus for providing compressed non-interlaced scanned video signal; Kamil M. Uz, 348/426, 409, 441, 467 [IMAGE AVAILABLE]
 - 28. 5,400,348, Mar. 21, 1995, Packet start detection using check bit coding; Sung-Moon Yang, 371/42 [IMAGE AVAILABLE]
 - 29. 5,392,223, Feb. 21, 1995, Audio/video communications processor; Joseph C. Caci, 364/514A; 348/17; 364/144, 146 [IMAGE AVAILABLE]
 - 30. 5,377,051, Dec. 27, 1994, Digital video recorder compatible receiver with trick play image enhancement; Frank A. Lane, et al., 386/81, 124 [IMAGE AVAILABLE]

- 31. 5,375,174, Dec. 20, 1994, Remote siren headset; Jeffrey N. Denenberg, 381/71 [IMAGE AVAILABLE]
- 32. 5,341,318, Aug. 23, 1994, System for compression and decompression of video data using discrete cosine transform and coding techniques; Alexandre Balkanski, et al., 364/725; 358/427; 364/715.02 [IMAGE AVAILABLE]
- 33. 5,329,365, Jul. 12, 1994, Method and apparatus for providing compressed non-interlaced scanned video signal; Kamil M. Uz, 348/469, 384, 415 [IMAGE AVAILABLE]
- 34. 5,323,396, Jun. 21, 1994, Digital transmission system, transmitter and receiver for use in the transmission system; Gerardus C. P. Lokhoff, 370/468; 360/48; 370/471, 509; 375/241; 395/2.1 [IMAGE AVAILABLE]
- 35. 5,319,707, Jun. 7, 1994, System and method for multiplexing a plurality of digital program services for transmission to remote locations; Anthony J. Wasilewski, et al., 380/14; 348/473; 380/10 [IMAGE AVAILABLE]
- 36. 5,298,921, Mar. 29, 1994, System for communicating with external device registers via two-byte data **packets** over a serial bus; Dale E. Gulick, 395/286; 364/222.3, 919.4, DIG.1, DIG.2; 379/93; 395/800 [IMAGE AVAILABLE]
- 37. 5,287,178, Feb. 15, 1994, Reset control network for a video signal encoder; Alfonse A. Acampora, et al., 348/384, 469; 370/474; 375/242 [IMAGE AVAILABLE]
- 38. 5,283,819, Feb. 1, 1994, Computing and multimedia entertainment system; James A. Glick, et al., 379/90; 348/14, 552; 379/93 [IMAGE AVAILABLE]
- 39. 5,283,638, Feb. 1, 1994, Multimedia computing and telecommunications workstation; Daniel K. Engberg, et al., 348/14; 364/188; 379/90, 93, 96, 100 [IMAGE AVAILABLE]
- 40. 5,270,832, Dec. 14, 1993, System for compression and decompression of video data using discrete cosine transform and coding techniques; Alexandre Balkanski, et al., 358/432, 426, 433, 479 [IMAGE AVAILABLE]
- 41. 5,267,098, Nov. 30, 1993, Digital recording and **reproducing** system; Gerardus C. P. Lokhoff, 360/50, 48, 51 [IMAGE AVAILABLE]
- 42. 5,241,535, Aug. 31, 1993, Transmitter and receiver employing ✓ variable **rate** encoding method for use in network communication system; Hidetaka Yoshikawa, 370/394, 471; 375/241; 395/2.38 [IMAGE AVAILABLE]
- 43. 5,231,486, Jul. 27, 1993, Data separation processing in a dual channel digital high definition television system; Alfonse A. Acampora, et al., 348/390, 409, 469 [IMAGE AVAILABLE]
- 44. 5,214,741, May 25, 1993, Variable bit **rate** coding system; Masami Akamine, et al., 395/2.83, 2.35, 2.39 [IMAGE AVAILABLE]
- 45. 5,196,946, Mar. 23, 1993, System for compression and decompression

- of video data using discrete cosine transform and coding techniques; Alexandre Balkanski, et al., 358/433, 427; 382/166, 277 [IMAGE AVAILABLE]
- 46. 5,192,999, Mar. 9, 1993, Multipurpose computerized television; Ronald B. Graczyk, et al., 348/552, 571; 379/88, 93, 96, 100 [IMAGE AVAILABLE]
- 47. 5,191,548, Mar. 2, 1993, System for compression and decompression of video data using discrete cosine transform and coding techniques; Alexandre Balkanski, et al., 364/725, 724.16 [IMAGE AVAILABLE]
- 48. 5,189,669, Feb. 23, 1993, Cell transfer apparatus and method using a variable **rate** codec; Masakatsu Nunokawa, 370/391, 394 [IMAGE AVAILABLE]
- 49. 5,182,771, Jan. 26, 1993, Anti-taping method and apparatus for a multiplexed analog component television system; Randy Munich, et al., 380/5, 14 [IMAGE AVAILABLE]
- 50. 5,170,490, Dec. 8, 1992, Radio functions due to voice compression; Gregory L. Cannon, et al., 455/72; 370/280, 345; 395/2, 2.1, 2.79; 455/84, 343 [IMAGE AVAILABLE]
- 51. 5,150,113, Sep. 22, 1992, Method and apparatus for transmitting an information signal together with data **packets** of related and unrelated textual information and receiving apparatus therefor; Bjorn Bluthgen, 340/825.3 [IMAGE AVAILABLE]
- 52. 5,148,272, Sep. 15, 1992, Apparatus for recombining prioritized video data; Alfonse A. Acampora, et al., 348/397, 390; 370/522; 375/241, 246, 253 [IMAGE AVAILABLE]
- 53. 5,117,453, May 26, 1992, Telecommunication system; Joshua Piasecki, et al., 379/100; 375/216; 379/93 [IMAGE AVAILABLE]
- 54. 5,038,221, Aug. 6, 1991, Luminance encoded digital audio system; Louis Dorren, 386/46 [IMAGE AVAILABLE]
- 55. 5,018,136, May 21, 1991, Multiplexed digital packet telephone system; Raphael Gollub, 370/471, 477 [IMAGE AVAILABLE]
- 56. 4,975,896, Dec. 4, 1990, Communications network and method; Nicholas A. D'Agosto, III, et al., 369/29; 379/75, 88, 94, 96 [IMAGE AVAILABLE]
- 57. 4,969,136, Nov. 6, 1990, Communications network and method with appointment information communication capabilities; David B. Chamberlin, et al., 369/29, 25; 379/75, 84, 94, 96 [IMAGE AVAILABLE]
- 58. 4,935,813, Jun. 19, 1990, System of transmitting high-definition television pictures via a relatively narrow passband channel, and also a transmitter and a receiver suitable for the system; Frederic L. J. Fonsalas, et al., 348/424 [IMAGE AVAILABLE]
- 59. 4,914,699, Apr. 3, 1990, High frequency anti-jam communication system terminal; James G. Dunn, et al., 380/34; 375/202, 207, 209, 343; 380/46 [IMAGE AVAILABLE]

- 60. 4,896,209, Jan. 23, 1990, Passenger vehicle polling system having a central unit for polling passenger seat terminal units; Atsushi Matsuzaki, et al., 348/8; 340/825.08; 348/117, 836; 370/449; 455/6.3 [IMAGE AVAILABLE]
- 61. 4,890,328, Dec. 26, 1989, Voice synthesis utilizing multi-level filter excitation; Dimitrios P. Prezas, et al., 395/2.32 [IMAGE AVAILABLE]
- 62. 4,887,152, Dec. 12, 1989, Message delivery system operable in an override mode upon reception of a command signal; Atsushi Matsuzaki, et al., 348/8; 340/825.08, 825.22, 825.28; 348/117, 836; 455/4.2, 31.1 [IMAGE AVAILABLE]
- 63. 4,831,616, May 16, 1989, Multiplexed fiber optics wideband data distribution system; David R. Huber, 359/137, 123, 125; 370/352 [IMAGE AVAILABLE]
- 64. 4,819,231, Apr. 4, 1989, Framing timing detection circuit for a character code broadcasting system; Osamu Yamada, 375/367 [IMAGE AVAILABLE]
- 65. 4,797,926, Jan. 10, 1989, Digital speech vocoder; Edward C. Bronson, et al., 395/2.23, 2.7 [IMAGE AVAILABLE]
- 66. 4,797,923, Jan. 10, 1989, Super resolving partial wave analyzer-transceiver; William L. Clarke, 395/2.12; 324/76.12, 76.19; 364/576, 724.12, 726; 375/204, 377 [IMAGE AVAILABLE]
- 67. 4,782,485, Nov. 1, 1988, Multiplexed digital packet telephone system; Raphael Gollub, 370/477, 389 [IMAGE AVAILABLE]
- 68. 4,771,465, Sep. 13, 1988, Digital speech sinusoidal vocoder with transmission of only subset of harmonics; Edward C. Bronson, et al., 395/2.16, 2.12, 2.17, 2.18, 2.28 [IMAGE AVAILABLE]
- 69. 4,761,796, Aug. 2, 1988, High frequency spread spectrum communication system terminal; James Dunn, et al., 375/202; 380/34 [IMAGE AVAILABLE]
- 70. 4,712,131, Dec. 8, 1987, Sync apparatus for image multiplex transmission system; Toshiyuki Tanabe, 348/464, 622; 371/42; 375/359, 371 [IMAGE AVAILABLE]
- 71. 4,686,703, Aug. 11, 1987, System for bidirectional digital transmission with echo cancellation; Carlo M. Bruno, et al., 379/410; 370/290; 379/406 [IMAGE AVAILABLE]
- 72. 4,656,628, Apr. 7, 1987, Digital signal transmission system; Yoichi Tan, 370/448, 471, 501 [IMAGE AVAILABLE]
- 73. 4,636,854, Jan. 13, 1987, Transmission system; Gerald O. Crowther, et al., 380/20, 19 [IMAGE AVAILABLE]
- 74. 4,630,271, Dec. 16, 1986, Error correction method and apparatus for data broadcasting system; Osamu Yamada, 371/37.9 [IMAGE AVAILABLE]
- 75. 4,571,603, Feb. 18, 1986, Deformable mirror electrostatic printer;

- Larry J. Hornbeck, et al., 347/239; 257/436 [IMAGE AVAILABLE]
- 76. 4,527,278, Jul. 2, 1985, Method for correcting the frequency of a local carrier in a receiver of a data transmission system and receiver using this method; Alain Deconche, et al., 375/344; 327/113, 155; 329/325 [IMAGE AVAILABLE]
- 77. 4,513,390, Apr. 23, 1985, System for digital transmission and synthesis of integrated data; Gerard O. Walter, et al., 395/800; 348/96; 358/261.2, 401, 403, 461, 466, 483, 486, 497; 364/919, 919.1, 926.1, 926.9, 926.91, 926.92, 927.1, 927.2, 927.4, 927.6, 927.64, 927.8, 927.92, 927.93, 927.95, 928, 929.2, 929.4, 930, 930.7, 932.62, 933, 933.62, 933.9, 935.2, 935.3, 935.4, 935.41, 939, 939.2, 939.4, 940, 940.1, 940.2, 940.4, 947, 947.5, 951.1, 951.3, 952, 952.1, 953, 953.4, 954, 954.1, 963, 963.4, 974, DIG.2; 395/885 [IMAGE AVAILABLE]
- 78. 4,450,477, May 22, 1984, Television information system; Bruce E. Lovett, 348/7, 12, 473; 455/5.1 [IMAGE AVAILABLE]
- 79. 4,257,703, Mar. 24, 1981, Collision avoidance using optical pattern growth **rate**; George W. Goodrich, 356/4.03; 340/436, 903; 348/148; 356/28, 394; 364/565 [IMAGE AVAILABLE]